

REMARKS/ARGUMENTS

The Examiner has objected to the disclosure for containing various informalities as set forth in Paragraph 2. Specifically, the Examiner states that "[o]n page 4, line 9, number 54 should be 56 and number 56 should be 54". In response, Applicant has amended the specification to correct these informalities. The Examiner also states in Paragraph 2 that "[o]n page 4, lines 21-22, opening 26 is in the barrel and not the receiver." Applicant respectfully traverses this objection.

As shown in Fig. 1, the muzzle-loading rifle 10 has a barrel 12 that is attached to and spans from the stock 16. The receiver 14 also is attached to the stock 16 and abuts the rearward end 20 of the barrel 12. An opening 26 for receiving a firing element 28 is cut into the receiver 14. (Page 3, lines 13-15). The opening 26 lies in the middle of the receiver 14, midway between the end cap 36 and the rearward end 20 of the barrel 12. As shown in Fig. 1 and stated in the specification, the opening 26 is in the receiver 14 and not the barrel 12. Applicant respectfully requests that the Examiner withdraw this objection.

The Examiner has rejected claims 3 and 4 under 35 U.S.C. § 102(b) as being anticipated by Knight (U.S. Patent No. 5,644,861) and claim 3 as being anticipated by Johnston (U.S. Patent No. 5,706,598). In response, Applicant has amended claim 3 and added amended limitations from claim 4. Applicant has also cancelled claim 4. Specifically, claim 3 has been amended to require in part that the portion of the reduced diameter and the shoulder portion of the firing element be located at the forwardmost end of the firing element. Applicant believes that this amendment overcomes

the Examiner's rejection.

Anticipation "requires that the same invention, including each element and limitation of the claims, was known or used by others before it was invented by the patentee." *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 299, 302, 36 U.S.P.Q.2d 1101, 1103 (Fed. Cir. 1995). "[P]rior knowledge by others requires that all of the elements and limitations of the claimed subject matter must be expressly or inherently described in a single prior art reference." *Elan Pharms., Inc. v. Mayo Foundation for Medical Educ. & Research*, 304 F.2d 1221, 1227, 64 U.S.P.Q.2d 1292 (Fed. Cir. 2002) (citing *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950 (Fed. Cir. 1999); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 7 U.S.P.Q.2d 1057, 1064 (Fed. Cir. 1988)). "The single reference must describe and enable the claimed invention, **including all claim limitations**, with sufficient clarity and detail to establish that the subject matter already existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention." *Id.* (citing *Crown Operations Int'l, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375, 62 U.S.P.Q.2d 1917, 1921 (Fed. Cir. 2002); *In re Spada*, 911 F.2d 705, 708 15 U.S.P.Q.2d 1655, 1657 (Fed. Cir. 1990)). See also *PPG Indus., Inc. v. Guardian Indus. Corp.*, 75 F.3d 1558, 1566, 37 U.S.P.Q.2d 1618, 1624 (Fed. Cir. 1996) (emphasis added).

Amended claim 3 requires in part:

a **forwardmost** portion of reduced diameter, and a shoulder portion on the body member between the **forwardmost** and rearward portions dwelling in a plane perpendicular to a center elongated axis of the body member. (Emphasis added)

As shown in Fig. 5, Knight '861 includes a groove 44 in the forward half of the firing element. The Examiner has identified groove 44 as being a portion of reduced diameter in the forward end of the firing element. Amended claim 3 requires that the portion of reduced diameter be located in the forwardmost end of the firing element, a limitation that Knight '861 does not meet. As shown in Fig. 5, the forwardmost end of Knight '861 is of a greater diameter than groove 44.

The Examiner also has identified the side wall of groove 44 to be a shoulder portion, also located in the forward half of the firing element. Amended claim 3 requires that the shoulder portion be located in the forwardmost end of the firing element, a limitation that Knight '861 does not meet. As shown in Fig. 5, Knight '861 does not teach a shoulder portion in the forwardmost portion of the firing element. While Knight '861 may include a portion of reduced diameter on the forward half of the firing element, Knight '861 does not teach a portion of reduced diameter in the forwardmost portion. Further, Knight '861 does not teach a shoulder portion in the forwardmost end of the firing element. Therefore, Knight '861 does not anticipate claim 3 as amended. Accordingly, Applicant requests that the rejection be withdrawn.

Johnston discloses a cartridge casing 150, as best shown in Figure 4. The cartridge casing 150 has a wall 150A and a head 150B. The wall 150A extends the whole length of the casing and is of a uniform outer diameter. The head 150B is at a rearward portion of the casing and appears similar to a flange, serving the same purpose as

a percussion element. The head 150B is of the same outer diameter as the wall 150A and is adjoined to the wall by a neck portion. Claim 3 requires that the forward portion of the body member be of a smaller diameter than the rearward. Even if wall 150A were to be considered the forward portion, it is of the same diameter as the head 150B. Claim 3 also requires that a shoulder portion connect the forward and rearward portions. That is not taught by Johnston. The Wall 150A and head 150B are adjoined not by a shoulder portion, but rather by a depression or neck.

As demonstrated above, Knight and Johnston do not meet the requirements of Applicant's claims. Because of this, it cannot be said that Knight or Johnston anticipate Applicant's invention. Therefore, since all the claim limitations are not taught in the prior art, the Examiner has failed to establish anticipation and the rejection should be withdrawn.

Finally, the Examiner has rejected claim 3 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,647,653 B1. More specifically, the Examiner has stated that while claim 3 is not identical, it is not patentably distinct because all of the limitations are contained either directly or inherently in claim 2 of U.S. Patent No. 6,647,653 B1. Applicant respectfully disagrees.

The Applicant reminds the Examiner that the present Application is a divisional Application of U.S. Serial No. 10/145,463 filed May 14, 2002, now U.S. Patent No. 6,647,653. Applicant further reminds the Examiner that claims 3 and 4 were subject to a restriction requirement and pertained to a species identified in Fig. 2, for an in-line muzzleloading rifle. Accordingly, because of the restriction requirement,

under 35 U.S.C. § 121 and MPEP 804.01, the 6,647,653 reference may not be used and the Examiner's rejection should be withdrawn.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 50-2098.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'T. Zarley', with a long horizontal line extending to the left.

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